SYNOPSIS OF
PROPOSED AMENDMENTS TO THE
RULES AND REGULATIONS OF THE DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION
RELATING TO WATER QUALITY CONTROL, CHAPTER 391-3-6

The Proposed Amendments revise **Rule 391-3-6-.03 Water Use Classifications and Water Quality Standards.**

Purpose of Amendment:
The Federal Clean Water Act (CWA), requires States and authorized Indian Tribes to review their water quality standards at least once every three years, and revise them if appropriate. EPD is proposing amendments based on comments received from the public and based on new EPA recommended criteria.

Features:

- Updating specific water use classifications of waterbodies.
- Amending the numeric human health toxic priority pollutant criteria for 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD) based on recalculation following the change in the fish consumption rate.
- Remove the minimum hardness value in the equation to calculate metal aquatic life criteria.
- Amending the Lake Allatoona nutrient (chlorophyll *a*, total phosphorus, and total nitrogen) criteria based on current modeling.
- Clarify language on shellfish growing areas for meeting bacteria standards, update the reference manual for bacteria requirements, and amend language to clarify waters that generally support shellfish.
- Correct various typographical, grammatical, and formating errors, including alphabetizing designated uses by river basin and trout streams by county.

The following amendments are proposed:

Rule 391-3-6-.03(14) Specific Water Use Classifications is proposed for amendment by updating the designated uses of the State's waterbodies, with particular attention to drinking water segments. A number of Georgia's waters (lakes and streams) are being used as drinking water sources. This section should identify all segments that are currently being used as a drinking water source to afford protection with the applicable water quality criteria with this designation. Unfortunately, this section has not been updated recently, and additional drinking water intakes are now located throughout the State beyond what is listed in this section. As a result, EPD updated and revised all segments that should be classified as drinking water. In addition, several of our reservoirs are used recreationally and this designation was added, if not already, to those

reservoirs. The methodology to define the new or redefine the old segments was primarily by hydrology feature (i.e., named tributary or dam) instead of using road names where possible. It should also be noted that this section was further alphabetized by river basin for easier reference.

Rule 391-3-6-.03(5) General Criteria for All Waters is proposed for amendment of sub-paragraph (e)(vi) for the Toxic Priority Pollutant 2,3,7,8 tetrachlorodibenzo-p-dioxin (TCDD). The current Georgia numeric human health criteria for the toxic priority pollutants were updated in 2008 based on EPA's most recent methodology, *Methodology for Deriving Ambient Water Quality Criteria for the Protection of Human Health (2000)* with the exception of this priority pollutant. The 2000 Human Health Methodology was the first revision by EPA in 20 years and reflected the advances that have occurred in the areas of chemical cancer potency factors or non-cancer reference doses, and more significantly by using the new general population fish consumption rate of 17.5 grams per day in the criterion calculations. Using the 17.5 grams per day consumption rate in the calculations results in a criterion that is approximately 2.7 times lower than that calculated using the previous 6.5 grams per day rate.

Rule 391-3-6-.03(5) General Criteria for All Waters is proposed for amendment of sub-paragraph (e)(ii) in footnote 3 by removing the reference to the minimum hardness in calculation of aquatic life criteria for metals. Some of the metals (cadmium, chromium III, copper, lead, nickel, and zinc) in this section are hardness dependent with the equation having a cutoff of 25 mg/L (as calcium carbonate) hardness. In 2005, EPA published a table compilation of national recommended water quality criteria, with these six metals now not including a minimum hardness cutoff. The sentence referring to minimum hardness will be deleted.

Rule 391-3-6-.03(17) Specific Criteria for Lakes and Major Lake Tributaries is proposed for amendment of sub-paragraphs (d)(i) and (d)(iii) and (d)(viii) based on modeling of nutrient dynamics in the Lake Allatoona watershed. EPD is currently preparing the TMDL for the Etowah River arm in Cherokee County and the Allatoona Creek arm in Cobb and Bartow Counties. TMDL modeling indicates that the elevated levels of chlorophyll *a* are due in large part to current and future landuse changes (i.e., urbanization) and the associated nutrient runoff with this increase in impervious surfaces, followed by nutrient fluxes from sediment, with the least impact of nutrients from point sources. After the urban and agricultural nutrient loading reductions are applied to the Lake Allatoona Watershed, modeling still indicates total nitrogen and total phosphorus levels above current standards, which leads to elevated chlorophyll *a* levels. Therefore, chlorophyll *a*, total nitrogen, and total phosphorus standards are being revised.

Rule 391-3-6-.03(6) Specific Criteria for Classified Water Usage is proposed for revision of sub-paragraph (c)(iii) which establishes specific bacteria criteria that protect areas along the coast where shellfish may be harvested. Currently,

the language states that the bacteria criteria applies to waters designated as "approved shellfish harvesting waters". The term "approved shellfish harvesting waters" is being changed to "shellfish growing area". The reason for this is that "shellfish growing areas" are areas that the Coastal Resources Division (CRD) have established as potentially being suitable for shellfish harvesting based on sanitary surveys. Within the shellfish growing areas, CRD designates certain areas as approved shellfish harvesting waters based on the results of bacteria monitoring. It is not possible to apply the bacteria criteria to "approved shellfish harvesting areas" because if the concentration of bacteria exceeds the criteria, the water is removed from the list of approved waters. The bacteria criteria should instead be applied to the "shellfish growing area". Applying the criteria to the growing area will result in the protection of all the approved shellfish harvesting waters within the boundaries of the growing area. In addition, the reference manual for the bacteria criteria for shellfish growing areas will be updated.

Rule 391-3-6-.03(16) Waters Generally Supporting Shellfish is proposed for amendment by clarifying that the waters listed here either support or have the potential to support shellfish, but this does not necessarily mean that it is legal to harvest shellfish from these areas.

STATEMENT OF RATIONALE

Chapter 391-3-6 Rules and Regulations for Water Quality Control establish, pursuant to O.C.G.A. Section 12-5-20, water quality standards for the State of Georgia. The rationale for this amendment to this rule include the following:

- The Federal Clean Water Act and 40 C.F.R. 131.20 requires States to review water quality standards at least once every three years and to revise them if appropriate
- To remain in compliance with the latest EPA methodology and guidance as it pertains to Georgia's water quality control program
- To reflect input from stakeholders and permit holders
- To reflect the latest technical information available, such as water uses, water quality field data, reference manuals, and watershed modeling
- To coordinate and maintain compliance with related coastal classifications and protection of shellfish

The proposed revisions described above are not expected to result in significant additional costs to the Department of Natural Resources or to the regulated community. This is because 1) some of the revisions are simply clarifications of Rules; 2) few permittees have the human health and metals criteria in their permits, so the change to the criteria is not expected to cause problems for the majority of permittees; 3) the promulgation of the revised Lake Allatoona criteria will result in less stringent standards; and 4) the updating of designated uses of waterbodies will not cost additional regulatory resources.